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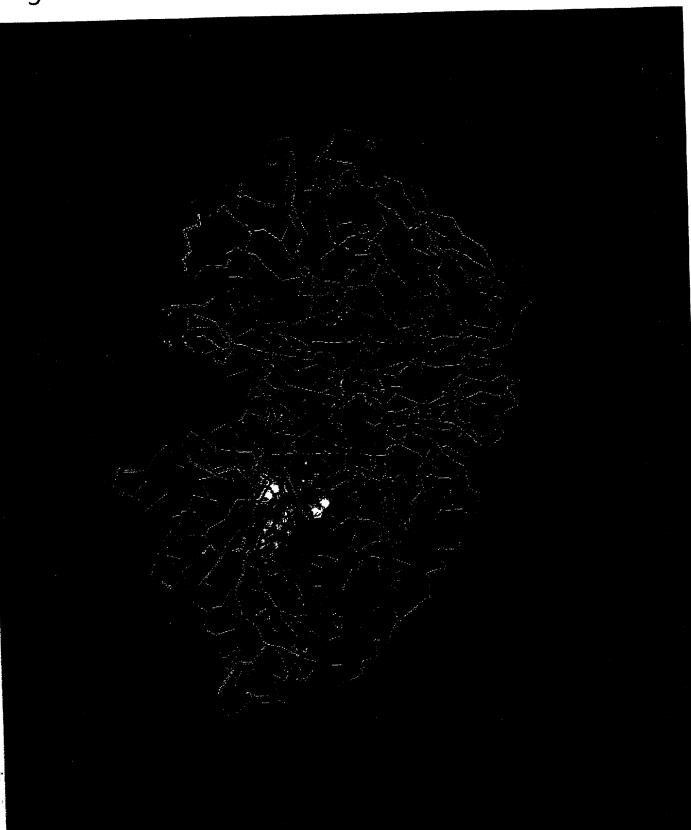


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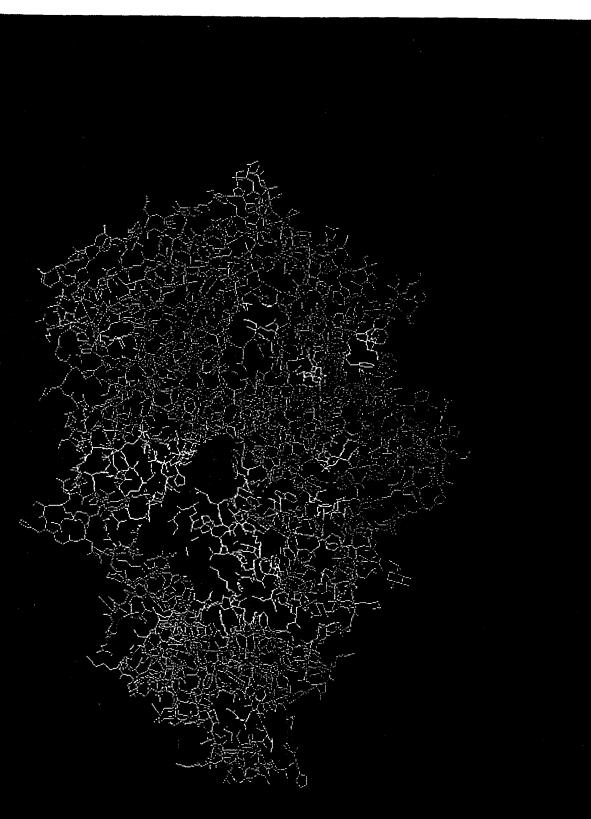
Fig.3

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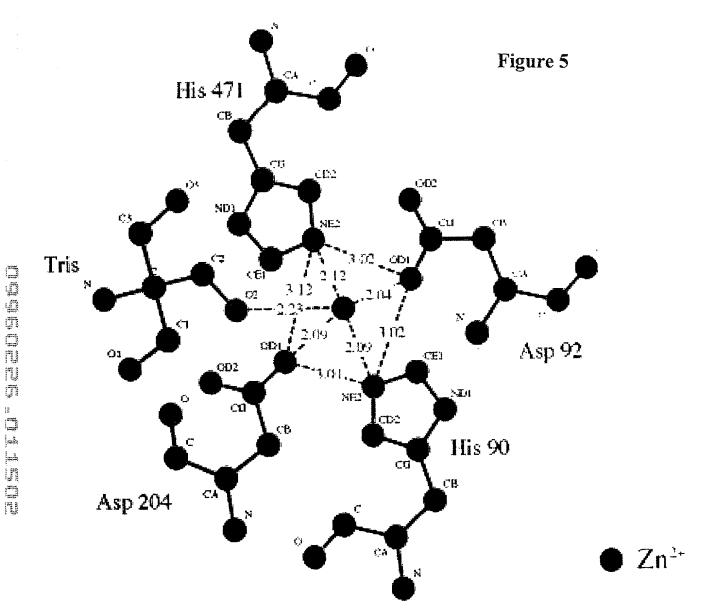


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pMT/BiP-N-HIS-dGMII [851 to 4042] -> 1-phase Translation

DNA sequence

6642 b.p. TCGCGCGTTTCG ... AGGCCCTTTCGT circular

Figure 6

N-HIS added to pMTV5HisA (b/t BglII/EcoRI) for drosophilla expression of tagged proteins. Add drosophila dGMII from clone D11 (shortened 3') DAK/Tara 15-3-99

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H T 2921/691 cct cga P R 3011/721	tcg S l gag E l cat H	Y atc I gta	A tca S ccg	ttg L gtg	cgg R cac	gtt V ttc	ggt G aag	aac N ttc	gga G 3041 ctc	ecc P ./731 aag K	acc T tat Y	L ggc	A gtt	F cga	S tcg	E cat	Q ggc	G gat	L L 3071/74 aga tco	K 1 ggt G	S gcc	I tat	Q ctg	L ttc	T ctg	Q ccc	D aat
H T 2921/691 cct cga P R 3011/721 agc cca S P 3101/751 gga cca	tcg S gag E cat H	Y atc I gta V tcg	tca s ccg P	ttg L gtg V gtc	cgg R cac H	gtt V ttc F	ggt G aag K	aac N ttc F	gga G 3041 ctc L 3131 cca	ecc P ./733 aag K ./763 gtg	acc T tat Y l	L ggc G etg	A gtt V gtg	F cga R act	S tcg S aag	E cat H ggc	Q ggc G aaa	gat D ctg	L L 3071/74 aga tco R S 3161/77 gag tcg	K 1 ggt G 1 tcc	S gcc A gtg	I tat Y agc	Q ctg L gtg	L ttc F gga	T ctg L ctt	Q ccc P ccg	D aat N agc
H T 2921/691 cct cga P R 3011/721 agc cca S P 3101/751 gga cca G P	tcg S gag E cat H gct	Y atc I gta V tcg	tca s ccg P	ttg L gtg V gtc	cgg R cac H	gtt V ttc F	ggt G aag K	aac N ttc F	gga G 3041 ctc L 3131 cca P	ecc P ./73; aag K ./76; gtg V	acc T tat Y l gtc V	L ggc G etg	A gtt V gtg	F cga R act	S tcg S aag	E cat H ggc	Q ggc G aaa	gat D ctg	L L 3071/74 aga tcc R S 3161/77 gag tcg E S	K 1 ggt G 1 tcc S	S gcc A gtg	I tat Y agc	Q ctg L gtg	L ttc F gga	T ctg L ctt	Q ccc P ccg	D aat N agc
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3431/861 3401/851 cet ttg cag gcc aac tat tat ccc ata cct tet ggt atg ttc att gag gat gcc aat acg cga etc act etc etc ecg ggt caa ecg etg P L Q A N Y Y P I P S G M F I E D A N T R L T L L T G Q P 3461/871 3491/881 3521/891 ggt gga tet tet etg gee teg gge gag eta gag att atg caa gat egt ege etg gee age gat gat gaa ege gge etg gga eag ggt gtt
G G S S L A S G E L E I M Q D R R L A S D D E R G L G Q G V
3551/901 3581/911 3611/921 ttg gac aac aag cog gtg ctg cat att tat cgg ctg gtg ctg gag aag gtt aac aac tgt gtc cga cog tca aag ctt cat cct goc ggc L D N K P V L H I Y R L V L E K V N N C V R P S K L H P A G 3671/941 3701/951 3641/931 tat ttg aca agt gcc gca cac aaa gca tcg cag tca ctg ctg gat cca ctg gac aag ttt ata ttc gct gaa aat gag tgg atc ggg gca
Y L T S A A H K A S Q S L L D P L D K F I F A E N E W I G A
3731/961 3761/971 3791/981 3761/971 3791/981 3731/961 cag ggg caa ttt ggt ggc gat cat cet teg get egt gag gat ete gat gtg teg gtg atg aga ege tta ace aag age teg gec aaa ace Q G Q F G G D H P S A R E D L D V S V M R R L T K S S A K T 3821/991 3851/1001 3881/1011 cag cga gta gge tae gtt ctg cae cge ace aat ctg atg caa tge gge act cea gag gag cat aca cag aag ctg gat gtg tge cae cta Q R V G Y V L H R T N L M Q C G T P E E H T Q K L D V C H L 3911/1021 3941/1031 3941/1041 ctg ccg aat gtg gcg aga tgc gag cgc acg acg ctg act ttc ctg cag aat ttg gag cac ttg gat ggc atg gtg gcg ccg gaa gtg tgc L P N V A R C E R T T L T F L Q N L E H L D G M V A P E V C 4001/1051 4031/1061 ecc atg gaa acc gec get tat gtg age agt cac tea age TGA METAAYVS SHSS

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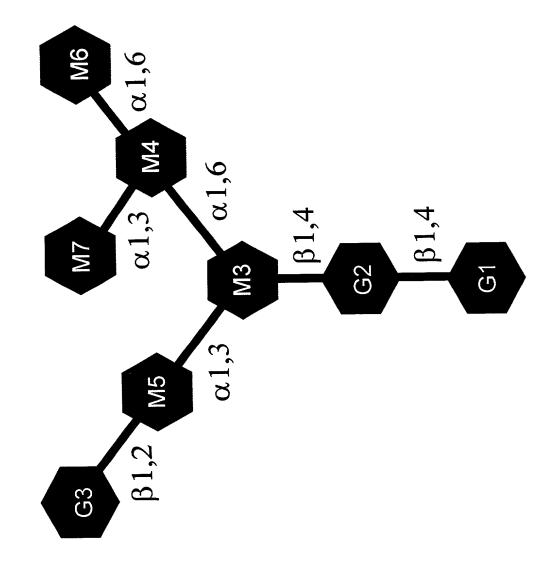
Printed by Doug Kuntz

Page 2/2 893 RLVLEKNINGVRPEKLHPAGILASANKASGELLDPL...DKFIFAENE 938 1028 TLELGGEFSPLGSSLPCDIHLVNIETIGSKVGNGHSNEAALILHRKG.FD 1076 C.....grpe..emg.klovchilen..varcertijflonlehldgm 1026 1077 CRESSKOTOLFCSTTOOKILVOKLINKFIVESLIPSSLSLMHSPPGTQNI 1126 881 KISSDIKSQNRFYTDLNGYQIQPRMTLSKLPLQANVYPMTMAYIQDAKH 930 939 WIGAQOOFGCDHPSAREDLDVSVMRNITK.. SSAKTQRVCYVLHRINLMQ 986 831 HGRIYSEVTCFFDHVTHRVRLYHIQGIEGGSVEVSNIVDIRKVYNRELAM 880 793 RLETHIDSGDIFYTDLNGLOFIKRRRIDKLPLOANYYPIPSGHFIEDANT 842 749 KOKLESSYSVGLPSYVHOTIM.....RGGAPEIRNIVDIGSLDNTEIVM 792 1027 VAPEVCPHETAAYVSSHSS 1045 1127 SEINLSPMEISTFRIQLR. 1144 Aug 21, 00 13:56 987 Page 1/2 450 GHARIEERLEGARRELSIFORHDGINGTARTHWVDYEDRAGALKACOH 499
548 LSSSLYTALTEARRHIGLEGRHOAITGTAKDMVVVYORRIFHSIAVLEK 597 133 YVLYKNKVE. DSGIFTIKNMINTEEGITLE. MSFVLLRFDQTGLMKQMAT 780 500 VMQQSVYRLLTKPSIYSPDFSFSYFTLDDSRWPGSGVEDSRTTILGEDI 549 198 IIONSAFLLIGKDKLTYDSYSPOTFLEMDLKQKSQDSLPQXNIIRLSAE. 646 550 LPSKHVVANATLPHMREQLVDFYVSSPFVSVTDLANNPVEAQVSPVMSWH 599 647 ..PRYLVYNPLEQDRISLVSVYVSSPTVQVFSASGKFVEVKVSAVW... 691 600 HOTLIKITHPOGSTTKKRIFFKARVPPHOLATIYOLATISDSKPEHTSYASN 649 669 TELEKKAPTSEPUZEDVÄFGDPREISIKVGNGPTLAFSEQQILKSIQL 699 1 LOEKIDHLERLLAENNEIISNIRDSVINLSESVEDGPKSSGSNFSGAAGS 100 101 H.L. PSQLSLSVDTADCLFASQSGSHNSDVQMLDVYSLISFDNFDGGW 148 113 NALRHUHDNPEHKETWARTSYFARFTWDLOENKKLOMKBTWRNOQLEFYT 162 198 HYVLKEDSRRKFIWSEISYLSKAMDIIDIQKKDAVKSLIENOQLEIVT 247 163 gomymporanskarntloj, tegotmi kofnavtetaska i opegispim 212 148 GGWYMPDEATPHYFALIDQLIEGHGMLENNIGVRPRSGMALDFFGHSFFM 297 213 PYILOKSOFKWHILORTHYSVKKELAOOROLEFLAROIMDHKODIALFTH 262 298 AYLLURAGISHMILQRVHYAVKKHFALHKTLEFFMRQMMDLGSVTDILCH 347 263 MAPPYSYDIPHTGPDPRVCCOPPKRMGFGLSCPWTVPPRTISDGNVA 312 348 MAPFYSYDIPHTGGPDPKICCQFDFKRLPGGRFGCPWGVPPETIHPGNVQ 397 363 HINSOAHFWOAOFOTLOEYFDAVHOAERA....GOAEFPTLSGDFFTYA 408 448 YANSQSKEKVKIQFGTLSDFFDALDKADETQRDKOĞSKFEVLSGDFFTYA 497 14 DPIRPPLKVARSPRPGGCODVVQD. VPHVDVQMLELYDRMSFKDIDGGVM 62 ALIGNMENT OF EXPRESSED SECRETED DROSPHILA MANNOSIDASE WITH HUMAN MANNOSIDASE Percent Similarity: 52.157 Percent Identity: 43.039 out Figure 7

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Monday August 21, 2000

Figure 8A





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Figure 8C

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Figure 10A

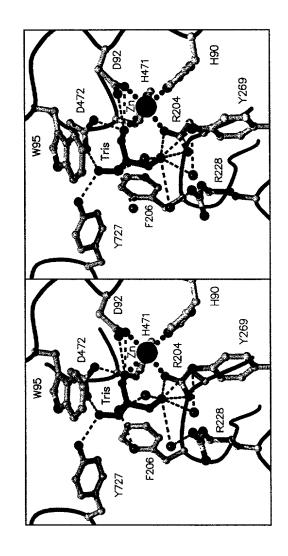


Figure 10B

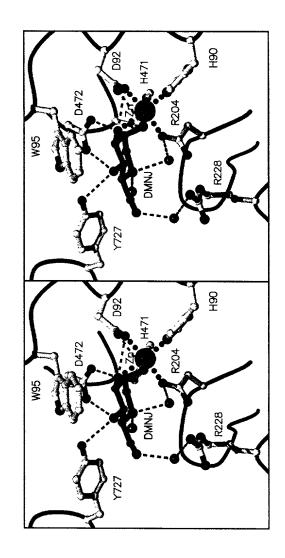
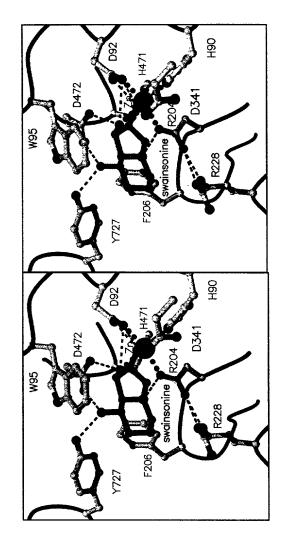
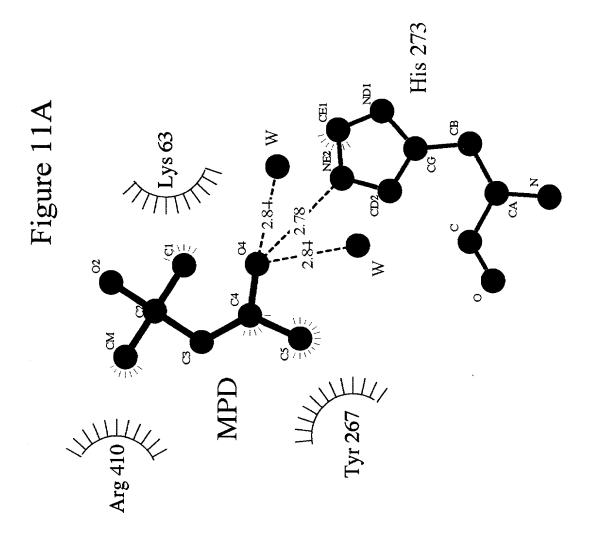
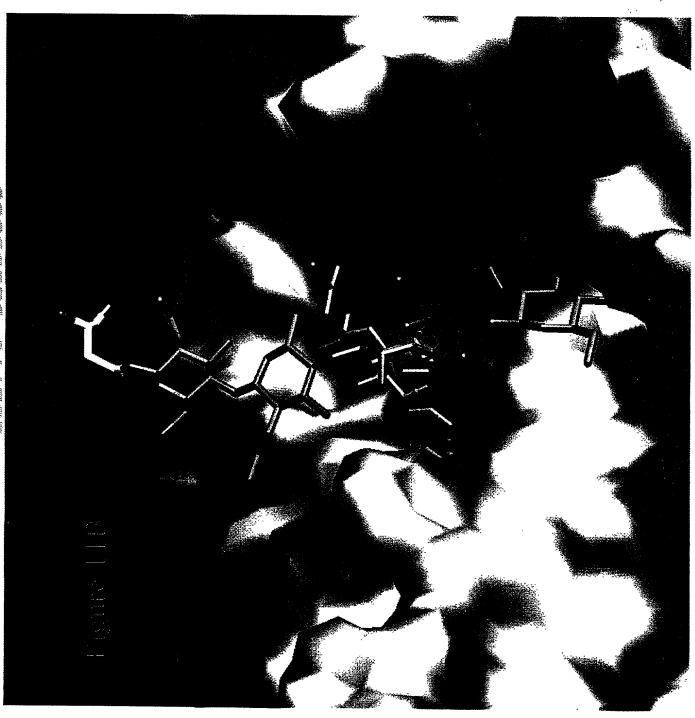
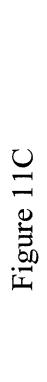


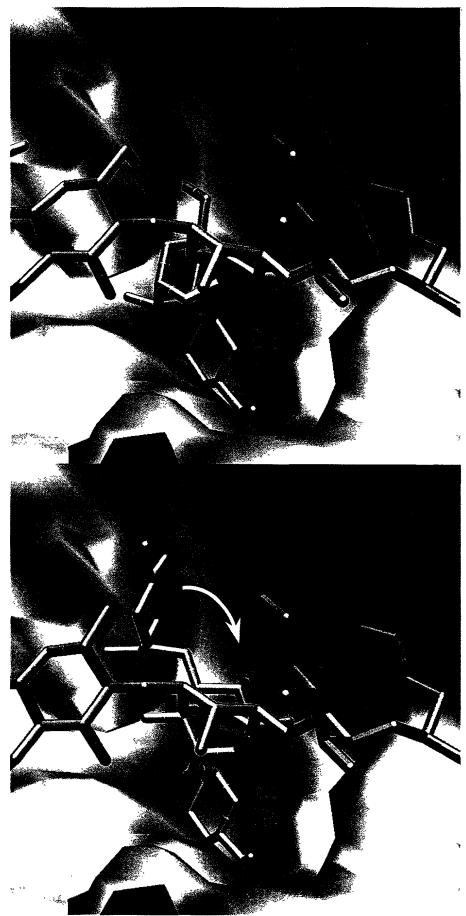
Figure 10C











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